

# Sensors & Diagnostics

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## IN THIS ISSUE

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### Cover

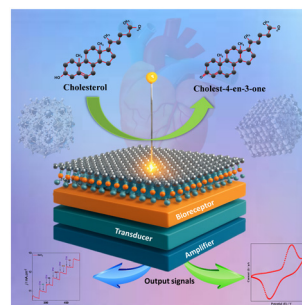
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## CRITICAL REVIEWS

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### Advancements in nonenzymatic electrochemical cholesterol detection: fostering material innovation with biosensing technologies

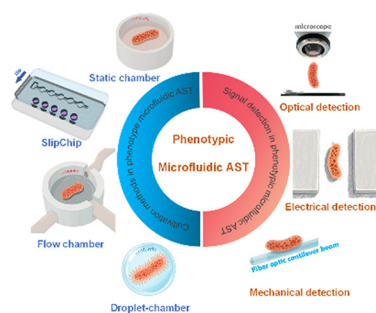
Sushmitha S., Shreeganesh Subraya Hegde,\*  
Lavanya Rao, Varsha G. and Badekai Ramachandra Bhat\*



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### Recent advances in phenotypic antimicrobial susceptibility testing enabled by microfluidic technologies

Mo Shen, Qi Wang, Qingqing Luo, Jiatong Zhao  
and Feng Shen\*



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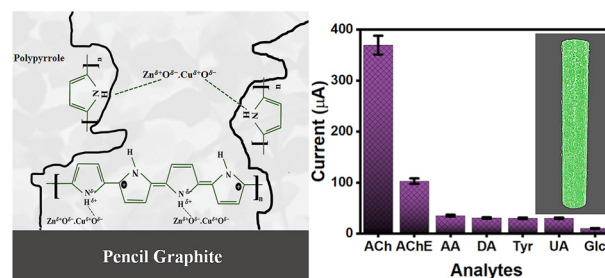
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## Electrochemically patterned biomimetic polypyrrole integrating ZnO-CuO nanoleaves for picomolar acetylcholine detection in cancer and neurological disorders

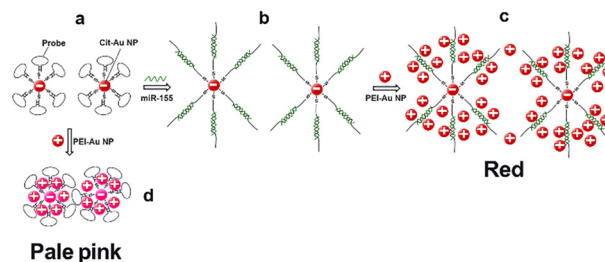
Maleeha Muhammad Din, Akhtar Hayat, Shaista Ijaz Khan, Palwasha Khan, Mazhar Amjad Gilani, Adnan Mujahid, Mian Hasnain Nawaz, Usman Latif\* and Adeel Afzal\*



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## Label-free optical detection of miRNA using electrostatic interactions between oppositely charged gold nanoparticles for signal amplification

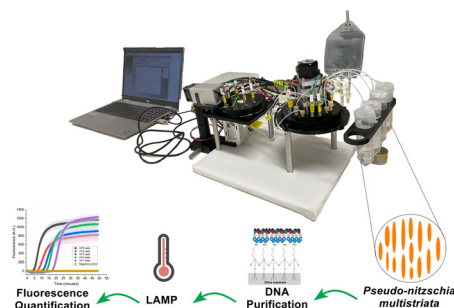
Fatemeh Hakimian, Behdad Delavari, Samaneh Hadian-Ghazvini, Mohammad Behnam Rad, Fariba Dashtestani, Vahid Sheikhhassani, Hamideh Fouladiha, Hadi Zare-Zardini and Hedayatollah Ghourchian\*



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## A lab-on-a-chip system integrating DNA purification and loop-mediated isothermal amplification for the quantification of the toxic diatom *Pseudo-nitzschia multistriata*

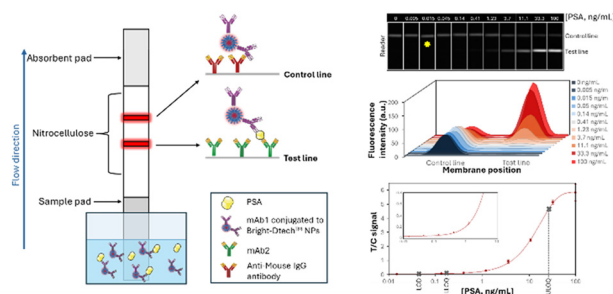
Ahmed I. Alrefaey,\* Jonathan S. McQuillan, Allison Schaap, Fabrizio Siracusa, Christopher L. Cardwell, John Walk, Daniel Rogers, Reuben Forrester, Matthew C. Mowlem and Julie C. Robidart



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## Lanthanide nanoparticles as ultra-sensitive luminescent probes for quantitative PSA detection via lateral flow assays

Juliette Lajoux, Mohamadou Sy, Loïc J. Charbonnière,\* Joan Goetz and Susana Brun\*





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**Correction: Highly selective detection of ethanol in biological fluids and alcoholic drinks using indium ethylenediamine functionalized graphene**

Ramin Boroujerdi,\* Amor Abdelkader and Richard Paul

